CLAIMS

1. An expander comprising:

a casing (11);

a rotor (22) rotatably supported in the casing (11);

an axial piston cylinder group (56) arranged annularly in the rotor (22) so as to surround an axis (L) of the rotor (22); and

a swash plate (31) rotatably supported in the casing (11) so that an axis (L1) of the swash plate (31) is inclined at a predetermined angle relative to the axis (L);

spherical projections (61a) formed at the forward end of pistons (42) of the axial piston cylinder group (56) abutting against spherical depressions (31a) formed in the swash plate (31) so as to coaxially surround the axis (L1) of the swash plate (31); and

the rotor (22) being rotated by supplying via a rotary valve (71) high-temperature, high-pressure steam to expansion chambers (43) defined between cylinder sleeves (41) and the pistons (42) of the axial piston cylinder group (56);

characterized in that a locus (T) of contact points between the spherical depressions (31a) of the swash plate (31) and the spherical projections (61a) of the pistons (42) is offset toward the expansion stroke side of the axial piston cylinder group (56).

2. The expander according to Claim 1, wherein the axis (L1) of the swash plate (31) is offset toward the exhaust stroke side of the axial piston cylinder group (56) relative to the axis (L) of the rotor (22).